**Lab3**

Install Ansible on AWS ec2 instances

To install ansible on Amazon Linux or to setup ansible lab in aws we need two or three ec2 instances. one is ansible master ec2 instance remaining ec2 instances are clients. in the master ec2 instance only we will install ansible.

1. Launch three or two ubuntu 16.04 instances
2. give Name one ubuntu ec2 instances as ansible-master
3. give remaining ec2 instances names as client1, clinet2
4. in both ansible master and client’s security groups
5. open ssh port no 22 from anywhere

Ansible built on python so install python in all Ec2 machines

To install python, execute below commands as root user

* sudo su -
* apt-get install python-minimal
* apt-get install python3

check python version with

* python –version

**Installing ansible in ansible master instance**

run below commands as root user

* sudo -i
* apt-get update
* apt-get install software-properties-common
* apt-add-repository ppa:ansible/ansible
* apt-get update
* apt-get install ansible

check ansible with

* ansible –version

**Establish ssh connection between ansible master and clients**

To establish a connection between master and clients we must generate the id\_rsa.pub key in master and paste this key in authorized keys file of client machines. This file exists in the .ssh directory. So, if the .ssh directory has not existed in client ec2 instances, we have to create the .ssh directory and inside that, we have to create the authorized keys file.

**Generating id\_rsa.pub public key in ansible master instance**

In master, ec2 instance execute below commands

* sudo –i
* ssh-keygen -t rsa

Text

Description automatically generated

It will create the id\_rsa.pub key in the .ssh directory

* cd .ssh
* ls
* id\_rsa id\_rsa.pub known\_hosts
* cat id\_rsa.pub

Text

Description automatically generated

**Copy this id\_rsa.pub key -In All Client Ec2 Instances**

* sudo -i
* cd .ssh
* ls

Here you can see the authorized keys file. [If the file is not existed here create the file with touch command

touch authorized keys and paste the id\_rsa.pub key in this file

* vi authorized\_keys

A screenshot of a computer

Description automatically generated

Paste id\_rsa.pub key of the master here

A screenshot of a computer

Description automatically generated with medium confidence

now we have shared ssh keys between master and clients

Adding clients to ansible master

to add clients to ansible master machine, we need to add all IP’s of clients in master machine /etc/ansible/hosts file

now go to ansible master machine

Ansible AWS Inventory

* cd /etc/ansible
* vi hosts
* add like below
* [web]
* <add private ip of ec2>

A screenshot of a computer

Description automatically generated

here 10.0.0.14 is private IP of the client1 machine

here you can mention all client machines private IP’s

Text

Description automatically generated

the first time it will ask are you sure you want to continue connecting yes/no

write yes and click on enter

you can see the output in green color.

now we have successfully configured ansible practice lab in aws.

now you can run your playbooks and roles in clients.

**IMP POINTS**

* allow ssh port forwarding between clients and master by opening port no 22
* install python in all master and client ec2 instances
* install ansible in master ec2 instance
* generate the public key in ansible master instance
* copy id\_rsa.pub key and paste in all client’s instances authorized keys file
* enter all client IPs in master /etc/ansible/hosts file
* now you can run your playbooks